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AN INVESTIGATION OF REGIONAL INCOME AND  
EMPLOYMENT MULTIPLIERS IN FOREST BASED  
INDUSTRIES IN NEW ZEALAND

A thesis presented in partial fulfilment  
of the requirements for the degree  
of Master of Arts  
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E R R A T U M

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## ABSTRACT

Income and employment multipliers are used to estimate the likely impact of forest-based industries in four regions of New Zealand: Northland, Rotorua, Westland, and Otago. The results obtained for each region are used to determine the variability of multipliers from one region to another and to evaluate the loss of potential income and employment as a consequence of leakage effects.

Regional income multipliers are calculated using the Keynesian model while regional employment multipliers are calculated using an ad hoc model designed to take into consideration the influences of regional variations in under-employment.

The data for the study were obtained from a questionnaire survey of sector plants and employees in each study region. Where appropriate supporting data were derived from published statistics.

Estimated values for the calculated multipliers fall between 1.20 and 1.80. These figures suggest that the leakage factor resulting from high regional imports, taxation, and unspent profits may be larger than previously believed. It is also concluded that regional income and employment multipliers vary from one region to another for a wide variety of reasons, many of which relate to plant characteristics rather than to regional characteristics. For this reason it may be more appropriate to calculate multipliers for individual

plants in the regional context rather than regional multipliers based on the combined and multivariate impacts of a group of plants.

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